

# EMBEDDED INTERROGATIVES AND COORDINATION IN FRENCH

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The aim of this paper is threefold: it is an attempt to collect highly dispersed comments on coordination of and in embedded interrogatives and to confront them with corpus material; it is an attempt to provide a more accurate analysis of elements introducing embedded interrogatives through structures in which they appear coordinated; it is an attempt to interpret the syntactic phenomena in terms of semantic properties. The paper concentrates on three particular types of coordination: the coordination of clauses introduced by interrogative elements and the conjunction *que*, the coordination of functionally different interrogative elements and the coordination of clauses with an opposite truth value.

## 0. INTRODUCTION<sup>1</sup>

This paper is a presentation of ongoing research into the area of complex sentences and particularly embedded interrogatives. The term “embedded interrogatives” has been preferred to “indirect questions”, which is also used, considering, along the lines of Huddleston (1994), that “interrogative” refers to certain structural properties of a clause, whereas “question” refers to pragmatic properties. Since the set of clauses I will consider here is essentially united on the basis of a structural property, namely the presence in clause-initial position of an interrogative element, it seemed preferable to use the term “interrogative”.

The scope of the paper is essentially empirical. By this I mean that the reflections formulated here have essentially been inspired by corpus material. The theoretical bases of the claims are thin, especially as far as coordination is concerned. It may surprise some that such different conjunctions as *et*, *ou*, *mais* (‘and’, ‘or’, ‘but’) are not neatly distinguished in the examples, but distinguishing them would have complicated the description far more than was relevant for embedded interrogatives. The corpora that have been used for this research are *Le Monde*, 1994, *Le*

*Soir*, 1994-95-96, *Roularta*, 1994-95-96-97 (which comprises *Le Vif*, *L'Express*, *Le Vif Weekend*, *Cash*, *Belgian Business & Industrie*, *Tendances*), all available on CD-ROM. Priority has been given to examples from *Le Monde*.

Observations about coordination of embedded interrogatives in French are rather sporadic. The particular interaction that appears to exist between embedded interrogatives and coordination has never been systematically examined, which is surprising since the phenomena that have been observed are particularly interesting. This paper is an attempt to collect some of the information already available, to deepen the analysis and to explore new areas where coordination seems to have an important impact. In the first part I will discuss the coordination of clauses introduced by an interrogative element and by *que*. The second part presents an analysis of the coordination of functionally different interrogative elements within the clause, which will be interpreted in terms of their semantic properties. This interpretation will be independently motivated by the analysis of coordinated interrogatives with an opposite truth value. The two parts of the paper will converge in a first outline of the syntactic properties of interrogative elements, which will be more refined than the standard dichotomy between complementizers and *wh*-terms.

## 1. REPETITION UNDER COORDINATION

It has been observed (Kayne, 1972; Korzen, 1985 and Piot, 1988 & 1995) that one of the differences between the subordinate clauses in (1) and (2) is that in the first case the introducing element can be replaced by *que* ('that') under coordination, while it cannot in the second:

- (1) a. S'ils viennent, on partira.
- b. S'ils viennent [et qu'on soit assez nombreux], on partira.
- (2) a. Je ne sais pas s'ils viennent.
- b. \*Je ne sais pas s'ils viennent [et qu'on est/soit assez nombreux] pour partir.

In the last example *si* has to be repeated in its actual form:

- (3) Je ne sais pas s'ils viennent et si on est assez nombreux pour partir.

According to Piot this is related to the interrogative nature of the element in (2). Kayne and Korzen, however, point out that within the series of interrogative elements there is one notable exception, *pourquoi*

('why'), which does allow coordination with *que* as an alternative for its repetition:

- (4) a. Je me demande pourquoi il peut rester et que moi je dois partir.  
(Kayne, 1972)  
b. Je ne vois pas pourquoi il devrait partir et que Pierre devrait l'accompagner (Korzen, 1985)

It appears further from Korzen that this particular characteristic of *pourquoi* is only one element in an impressive list of features that all illustrate the particular position of *pourquoi* among the elements that introduce embedded interrogatives (IEI).<sup>2</sup> The most important of these features, which has been noted by many observers (for instance Kayne, 1972; de Cornulier, 1974; and for the embedded clauses, Le Querler, 1996) is that, unlike other IEIs, *pourquoi* does not allow a nominal subject to be placed behind the verb. In Korzen's view this is due to the fact that *pourquoi*, being a sentence adverbial, is not part of the core sentence and that only elements of the core sentence, when positioned at the beginning of the clause, can trigger nominal subject inversion. In this sense, *pourquoi* behaves more like a conjunction, a conclusion which is hazarded not only by Korzen, but also, on other bases, by Rizzi (1996), for instance.

Following analyses by de Cornulier (1974), Korzen also questions the status of *comment* ('how'), especially in non-embedded interrogatives. However, it appears from the corpus that embedded interrogatives present some peculiarities as well, and more precisely the fact that in an example like (5) clauses introduced by *comment* and by *que* are coordinated:

- (5) On voit mieux comment Le Gray a continué à s'intéresser aux ombres portées sur les bâtiments, après la Mission de 1851 [...]; ou que Robuchon, qui annonce le pictorialisme, est un des premiers à donner des ciels chargés de noir. (Le Monde, 21/4/94: R12)

In fact, the coordination with *que* is less surprising in this case than it is in the case of *pourquoi*. Semantically, *comment* is indeed no longer a manner adverb in this clause. Its function is very similar to that of a conjunction like *que*, witness the following examples where the subordinate clause contains two manner adjuncts and is nonetheless introduced by *comment*:

- (6) Quand Vinko s'est rendu au commissariat pour raconter comment il avait été agressé au couteau, au marteau, les policiers lui ont répondu: "Tu n'as rien à faire ici. Tu es croate." (Le Monde, 7/4/94: 1)

Since it would be contradictory to simultaneously present an information as unspecified and specified, it is clear that we are not dealing here with an embedded interrogative and that *comment* is not an IEI.

Examples of this particular use of *comment* are numerous and do not, in this case, trigger nominal subject inversion:

- (7) \*... pour raconter comment avait été agressé son frère au couteau...

Subject inversion indeed seems to be necessarily related to the adverbial function of *comment*:

- (8) Lorsque je montre comment sont composés les sommaires des journaux télévisés [...] je suis poursuivi par l'organisme qui commercialise la formule 1, la FOCA, pour avoir montré une image d'un coureur, que tout le monde a vue. " (Le Monde, 24/5/94: 13)
- (9) [...] l'Agence Internationale de l'Energie Atomique [...] a constamment cherché à vérifier avec précision comment était déchargé le combustible pour vérifier sa durée de séjour dans le réacteur[...]. (Le Monde, 27/9/94: R01)

These, and other, considerations<sup>3</sup> lead to the conclusion that there are at least two different kinds of *comment* in subordinate clauses: one adverb and one conjunction. If the clauses introduced by the latter are not embedded interrogatives, only the former can be considered to be an IEI.

Besides *comment* there appears to be another element with a double nature. Consider the use of *quand* ('when') in the following example:

- (10) Te souviens-tu [...] quand on se déguisait ensemble en braconnier, avec le lapin dans la poche, et en gendarme menaçant. (Le Monde, 24/1/94: R05)

It seems that *quand* does not function as a time adverb, since a time adverb can be inserted in the clause:

- (11) te souviens tu quand on se déguisait en braconnier pendant la guerre...

Here again we are dealing with a particular use of the adverb, which comes close to the conjunction *que*. Although no examples were found in the corpus, the coordination of *quand* and *que* seems to be possible:

(12) *te souviens-tu quand on se déguisait et qu'on faisait peur au garçon des voisins.*

which means that the cases of *comment* and *quand* are parallel to a very large extent.

If all this is correct, there are at least three major categories of counter-examples to Piot's thesis: the normal use of *pourquoi* and the "special" use of *comment* and *quand*. It is however important to note that, with the exception of *pourquoi*, the counter-examples in fact confirm the thesis in that coordination with *que* appears to be allowed only if the introducing element of the first clause is not functioning as an IEI.

A second conclusion that should be drawn is that only adverbial IEIs allow coordination with *que*, and not even all of them: no example was found of a coordination between *où* ('where'), and *que*, and introspective examples sound awkward:

(13) ? *je ne sais pas où il a trouvé ce machin et qu'il va le remettre.*

There are in other words three major sets of IEIs with respect to coordination with *que*. The first set consists of the pronominal elements *qui*, *quoi* and the allomorphs of *quoi* (*ce que*, *ce qui*, *ce dont*), the adverbial *où* and the conjunction *si*, which do not allow coordination with *que*. The second consists of *comment* and *quand*, which allow coordination with *que* only when they have lost their interrogative status. The third set consists of *pourquoi*, for which coordination with *que* is not restricted. The diversity of the items in set 1, however, suggests that the description is not completely accurate and that research into other areas will be needed. This is the aim of section 2.

## 2. MULTIPLE INTERROGATIVES AND "COORDINATION" OF DIFFERENT IEIs

### 2.1. THE COMPLEMENTARITY OF MULTIPLE INTERROGATIVES AND COORDINATION

It has been observed that IEIs do not all behave similarly in the context of multiple interrogatives. A multiple interrogative, or multiple question, is an interrogative structure which has more than one IEI. It appears indeed from research by Baker (1970), Bolinger (1978), Aoun *et al.* (1981),

Saito and Lasnik (1984) and Hornstein (1995) that at least in French and English the formation of a multiple interrogative is difficult with elements like *why/pourquoi* and *whether/si*:

- (14) \*I wonder why you bought what. (= [100] in Hornstein, 1995, Chapter 7)
- (15) \*Tu as vu qui pourquoi (= [46b] in Aoun et al., 1981)
- (16) \*We're not sure whether who Bill saw. (= [54] in Baker, 1970)
- (17) \*Nous ne savons pas si Jean a vu qui.

However, the individual intuitions of the authors vary a lot, especially those of Bolinger, who accepts some examples similar to (14) and (17),<sup>4</sup> but, on the other hand, marks as ungrammatical some of the multiple interrogatives involving adverbial IEIs other than *pourquoi*. It seems indeed that, even though *pourquoi* and *si* cause most problems with respect to multiple interrogatives, they are not the only IEIs to cause problems. When we consider the following series of examples we see that other adverbial IEIs sound awkward in the context of a multiple interrogative, especially when two of them are combined:

- (18) Je me demande qui travaille où.
- (19) Je me demande qui travaille quand.
- (20) Je me demande qui travaille comment.
- (21) (a) Je me demande quand il travaille où.
- (b) ? Je me demande où il travaille quand.
- (22) (a) ? Je me demande quand il travaille comment.
- (b) ? Je me demande comment il travaille quand.
- (23) (a) ? Je me demande comment il travaille où.
- (b) ? Je me demande où il travaille comment.

Bolinger's conclusion is that the possibility to form a multiple interrogative depends on "what is 'of the essence' to the verb" (Bolinger, 1978:137). Now, the interesting thing about multiple interrogatives is, as Bolinger underlines, that the rejected examples can be made acceptable precisely by coordinating the IEIs:

- (24) Je me demande où il travaille et quand.
- (25) (a) Je me demande quand il travaille et comment.
- (b) Je me demande comment il travaille et quand.
- (26) (a) Je me demande comment il travaille et où.
- (b) Je me demande où il travaille et comment.

The fully acceptable multiple interrogatives allow coordination of the IEIs too, but only to the extent that there is an adverbial IEI involved:

- (27) \*Je me demande qui fait et quoi.
- (28) Je me demande qui travaille et où.
- (29) Je me demande qui travaille et quand.
- (30) Je me demande qui travaille et comment.
- (31) Je me demande quand il travaille et où.

Coordination of pronominal IEIs in argument position, like in (27), is not allowed at first sight, but examples where the object IEI is omissible do, in fact, not completely exclude it:

- (32) Je me demande qui décide et quoi.

which suggests that the coordination in this case is perhaps better described in terms of omissible/non-omissible elements than in terms of pronominal/adverbial elements or elements in argument/adjunct position.

The examples (18) to (32) also suggest that multiple interrogative and coordination are to some extent complementary phenomena: two non-omissible IEIs can only be combined in a multiple interrogative (17), two omissible IEIs can only be combined in a coordination, (28) to (31), for other combinations of IEIs the two structures overlap. This is also Bolinger's opinion, who ascribes the difference between the two structures mainly to the nature of the relationship between the IEI and the verb: essential IEIs do not allow coordination, non-essential IEIs do. With regard to the properties of a coordination, this sounds reasonable: in order for items to be coordinated, they should be functionally equivalent (cf. Dik, 1968). Since they are adjuncts, non-essential IEIs have more or less the same relationship with the verb, essential IEIs however always have different functions (subject vs. object) and, therefore, cannot be coordinated. There is, however, a serious problem with Bolinger's thesis: it cannot account for examples like (28), (29) and (30), where coordination seems to be allowed between functionally different items. Since this is contradictory to the standard assumptions on coordination, it is important that we have a close look at this type of coordination.

## 2.2. ARE THE IEIs REALLY COORDINATED?

Besides the fact that they contain a coordination of functionally different items, cases like (28) et sq. are particular in other respects:

- this kind of coordination can only occur in interrogative structures: similar coordinations in the corresponding declarative clauses sound awkward. Compare the following examples with their interrogative counterparts under (24) and (28):

(33) ?Je sais qu'il travaille de 8 à 5 et à Bruxelles

(34) \*Je sais que Jean travaille et à Bruxelles.

- as has been said before, the coordination is between functionally different elements, which is contrary to one of the basic principles of coordination, but it is even allowed with elements like *si* ('whether') that do not have a grammatical function in the clause:

(35) C'est que, sans savoir pour autant si et quand la Région prendra les choses en main, il y va de la sécurité de tous... (Le Soir, 11/7/95: 16)

- there are restrictions with respect to the position of the coordinated IEIs: omissible IEIs can be freely grouped together in clause-initial position:

(36) Nous sommes en train de vivre l'un de ces moments et nous ne pouvons savoir comment et quand nous réussirons à le surmonter. (Le Monde, 21/12/94)

There is an internal order in that *si* is always the first term of the coordination and *pourquoi* tends to be the last. Coordinations involving a non-omissible element, on the other hand, are necessarily discontinuous, the non-omissible IEI occupying the clause initial position, while the others are positioned to the right of the verb:

(37) Michel Foucault, qui en avait préfacé des extraits, se disait fasciné par ce récit méticuleux, rédigé dans le seul souci de restituer *ce qui s'est passé, comment, selon quelle intensité et avec quelle qualité de sensation* [...]. (Le Monde, 12/8/94: 11)

Grouping of IEIs in clause-initial position is excluded:

- (38) (a) \**dans le seul souci de restituer ce qui et comment s'est passé...*  
 (b) \**dans le seul souci de restituer comment et ce qui s'est passé...*



All this suggests that we are in fact not dealing with coordinations of IEIs in these cases, but rather with coordinations of reduced clauses. This can be easily demonstrated on the basis of example (35):

- (35) C'est que, sans savoir pour autant si et quand la Région prendra les choses en main, il y va de la sécurité de tous... (Le Soir, 11/7/95: 16)

The standard semantic analysis of IEIs like *quand* is based on the claim that they presuppose that the state of affairs described in the clause is true at least for one value of the IEI (Bolinger [1978] for English; Ducrot [1980] for French):

- (39) sans savoir quand la Région prendra les choses en main la Région prendra les choses en main (à un certain moment)

This analysis does not apply to *si*, since *si* is supposed to leave the truth value of the clause it introduces undetermined (Borillo, 1978). This means that if we assume that *si* and *quand* are part of the same clause, we run into a contradiction since the truth value of the same clause can not be both determined and undetermined. This is probably why the multiple interrogative structure is not allowed in this case:

- (40) (a) \*... sans savoir si quand la Région prendra les choses en main...  
(b) \*... sans savoir si la Région prendra les choses en main quand...

Unlike (40) example (35) is perfectly acceptable and interpretable, so that we are led to the conclusion that there must be more than one clause in it. Admitting this we can account for the particularities of the coordinations under analysis. Firstly, coordinations of this particular kind only occur in interrogatives because only IEIs can make up a clause by themselves, whereas the corresponding constituents of declaratives cannot. Compare (41) and (42) which refer to (33) and (34) :

- (41) Je sais qu'il travaille. Je sais quand. Je sais où.  
(42) Je sais qu'il travaille. \*Je sais de 8 à 5. \*Je sais à Bruxelles.

Secondly, coordination of IEIs violates only apparently the principle according to which the terms of a coordination should be functionally equivalent. If we admit that not the IEIs are coordinated, but the clauses they introduce, there is no violation, since clauses are functionally

equivalent. Coordinations between the functionally void *si* and other IEIs can be explained in the same way.

Finally, assuming that a coordination of IEIs is in fact a coordination of (reduced) clauses, we can account for the order of the IEIs under coordination. It seems indeed, on the basis of example (35) that the clause with the weakest presupposition must come first:

- (43) (a) ...sans savoir si et quand la Région prendra les choses en main...  
 (b) \*...sans savoir quand et si la Région prendra les choses en main  
 ...

This is reasonable since the order of (43a) allows the second clause to determine the undetermined truth value of the first, whereas the order of (43b) would create a contradictory situation in which the truth value of the first clause is annulled by the second.

There is in other words, in the case that was discussed, much to say in favour of an analysis of coordinated IEIs in terms of coordinated clauses and conflicting presuppositions and not in terms of syntactic relationship with the verb. The only question which remains is what this analysis implies for the coordination of other IEIs and the relation between coordination and multiple interrogatives.

### 2.3. CONSEQUENCES OF THE HYPOTHESIS

If it is true that (35) is acceptable because the conflicting IEIs apply to different clauses and that (40) is unacceptable because they apply to the same clause, it follows that in other cases where the multiple interrogative structure is excluded, there could also be a conflict between the IEIs. Following the outline of section 2.2. this conflict would essentially be related to a difference in the presuppositions the different IEIs imply. We have seen that the only IEI (besides *si*) which refuses any combination with another IEI in a multiple interrogative structure is *pourquoi*:

- (15) \*Tu as vu qui pourquoi (= [46b] in Aoun *et al.*, 1981)  
 (44) \*Quand a-t-il mangé pourquoi (= [46c] in Aoun *et al.*, 1981)

This would theoretically mean that the presuppositions implied by *pourquoi*, on the one hand, and IEIs like *qui* and *quand*, on the other, are basically different. Since *pourquoi* normally appears to the right of the other IEIs, its presupposition should be stronger. The question is now whether we can find independent evidence for this claim.

It seems that there are at least some promising elements which tend to prove that the presupposition implied by *pourquoi* is different from presuppositions implied by other IEIs. Korzen (1985), for instance, rightly stresses the fact that *pourquoi* (and one particular use of *comment*, which is not relevant here) stands in a particular relationship with negation. This can best be illustrated by coordinating clauses with the opposite truth value but the same IEI:

- (45) Dites-moi quand elle travaille et quand elle ne travaille pas.  
 (46) \*Dites-moi pourquoi elle travaille et pourquoi elle ne travaille pas.

It appears that the coordination is acceptable in the first example, but not in the second. The presupposition implied by *quand* does not exclude that a clause with the opposite truth value is true if the values of both *quand* are different. If *quand* is attributed two different values, there is no contradiction in (45). (46), on the other hand, is contradictory, since it is difficult to attribute two different values to *pourquoi* in a coordination of opposite clauses. The presupposition implied by *pourquoi* appears thus indeed to be stronger than that implied by *quand*. Other IEIs (except *si*) appear to be on the side of *quand* since coordination of opposite clauses is allowed. The example with *comment* is given with some reservation:

- (47) Dites-moi qui travaille et qui ne travaille pas.  
 (48) Dites-moi ce qu'elle a trouvé et ce qu'elle n'a pas trouvé.  
 (49) Dites-moi où elle est allée et où elle n'est pas allée.  
 (50) ?Dites-moi comment elle a procédé et comment elle n'a pas procédé.

This description is not completely satisfactory, because if we admit that *quand* and *comment* are on the same line as *qui*, *quoi* (and perhaps also *où*), we cannot explain why multiple interrogatives are difficult with either one of the first two items. In order to account for that and to keep the description consistent, we should find a difference between these IEIs with respect to presupposition. I have no conclusive evidence that would allow me to draw such a conclusion, but my corpus research provided me with some examples that give an indication in that sense. These examples are all the more interesting because they are also instances of coordinated clauses with opposite truth values and, thus, comparable to examples like (45) - (50):

- (51) "M. Paringaux, a fait, dans un article du Monde du 17-18 avril, deux erreurs: une de vocabulaire: je ne suis pas président du conseil général [...], et une de jugement: ce n'est pas à lui de décider qui est ou n'est pas mon ami. (Le Monde, 30/4/94: 2)
- (52) Face à ces arguments, d'autres spécialistes rappellent que Kertész est mort à quatre-vingt-onze ans, il a donc largement eu le temps de savoir ce qu'il voulait montrer ou pas. (Le Monde, 3/11/94: S02)
- (53) Il n'existe en Chine aucune directive précisant de quoi on peut ou ne peut pas parler. Personne n'a donné les motifs de l'interdiction du premier scénario de Xiao Mao, qui était ni plus ni moins dérangeant que le second. (Le Monde, 3/2/94: S07)

Unlike in the previous examples, the IEI is not repeated here and the coordination is assured by *ou* ('or') and not by *et* ('and'). Examples like this do not occur in the corpus when the clauses are introduced by *quand* or *comment*. It is not clear to me how this can be related to a difference in presupposition, but the most striking fact is that examples (51) - (53) come very close to what is the typical coordination (and for some the underlying structure: Borillo, 1978) of opposite clauses introduced by *si* ('whether'):

- (54) Je dis simplement si j'aime ou si je n'aime pas. (Le Monde, 6/1/94: R10)
- (55) M. Marsaud n'a pas encore révélé s'il sera ou non candidat. (Le Monde, 9/2/94: 8)

The only difference between (51)-(53) and (54)-(55) is in fact that *si* has to be repeated when a second verb is present. If we admit, like we have done before, that *si* does not imply any presupposition with regard to the truth value of the clause it introduces, we might conclude that the IEIs in examples (51) to (53), which display a similar structure, imply indeed a weaker presupposition than IEIs which do not appear in that structure. This would account not only for the fact that IEIs like *quand* and *comment* are mostly coordinated when combined with IEIs like *qui* and *quoi*, but also for the fact that inside this coordination they appear to the right of the verb (cf. example [37]).

However, as long as there are no other indications in support of this hypothesis, it should be taken with extreme caution: the facts relating to structure (coordination or multiple interrogative), order and negation seem to be consistent, but whether they have to be interpreted in terms of presupposition is open for discussion. The least we can say is that

they suggest that there are four different groups in the category of IEIs, which can be visualised as follows:

group	members	coordination/multiple interrogative	coordination with opposite clause
I	<i>si</i>	always coordination	yes, conjunction: <i>ou</i>
II	<i>qui, quoi</i>	mostly multiple interrogative	yes, conjunction: <i>ou</i> and <i>et</i>
III	<i>comment, quand, où</i>	mostly coordination	yes, conjunction: <i>et</i>
IV	<i>pourquoi</i>	always coordination	no

Inside a coordination, the order of the elements will normally conform to the order in which the categories are shown here. Note however that combinations of elements from I and II are impossible.

### 3. CONCLUSION

The analysis of coordinated embedded interrogatives has proved to be an interesting short-cut for the description of the basic syntactic properties of IEIs and the clauses they appear in. It has allowed us to draw up a first typology of IEIs, which reveals that not only the dichotomy between *wh*- terms and complementizers, which is a standard generative assumption, is far too simple to account accurately for the data, but also the alternative accounts that have been proposed and tend to associate *si* and *pourquoi* (Korzen, 1985; but also Rizzi, 1996). Section 1 defined three basic sets of IEIs, one of which has been split up in section 2. This does not however make the picture completely accurate since one element (*où*) is in different categories in section 1 and 2. Further research seems to be needed for this particular problem.

If the analysis of the data related to structure, order and negation in terms of presupposition is correct, the syntax and semantics of IEIs in embedded interrogatives are surprisingly coherent. The weakness or strength of the presupposition implied by an IEI would determine straightforwardly the choice between coordination and multiple interrogative and its position in a coordination (or the position of the

clause it represents). However, much more research is needed on presupposition in interrogative items to give any credit to this hypothesis.

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## NOTES

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2. I deliberately avoid symbols and terms like *wh*- and complementizer, since one of the aims of this paper is to cast doubt on their relevance.

3. Another important factor, which I treat in section 2, is the relationship between the IEs and negation. See Korzen (1985:96 sq.) for an analysis of *pourquoi*.

4. Bolinger accepts:

(i) *Why must they go where?*

(ii) *Why did they do what?*

(iii) *I'm trying to find out whether he wants what.*

Note that Hornstein (1995) considers an example like (ii) to be only apparently grammatical.

## REFERENCES

- Aoun, J., N. Hornstein and D. Sportiche (1981) "Aspects of Wide Scope Quantification", *Journal of Linguistic Research* 1, 67-95.
- Baker, C. (1970) "Notes on the Description of English Questions: the Role of an Abstract Question Morpheme", *Foundations of Language* 6, 197-219.
- Bolinger, D. (1978) "Asking more than one thing at a time". In Hiz, H. (ed.) *Questions*. Dordrecht/Boston: Reidel.
- Borillo, A. (1978) "Structure et valeur énonciative de l'interrogation totale en français", Aix-en-Provence: Thèse de doctorat.
- de Cornulier, B. (1974) "'Pourquoi' et l'inversion du sujet non clitique". In Roher, C. and N. Ruwet (eds.) *Actes du colloque franco-allemand*

- de grammaire transformationnelle. I. Etudes de syntaxe*. Tübingen: Niemeyer
- Dik, S. (1968) *Coordination*. Amsterdam: North-Holland.
- Ducrot, O. (1980) *Dire et ne pas dire*. Paris: Hermann.
- Hornstein, N. (1995) *Logical Form*. Cambridge Mass/Oxford: Blackwell.
- Huddleston, R. (1994) "The Contrast between Interrogatives and Questions", *Journal of Linguistics* 30/2, 411-439.
- Kayne, R. (1972) "Subject Inversion in French Interrogatives". In Casagrande, J. and B. Saciuk (eds.) *Generative Studies in Romance Languages*. Rowley Mass: Newbury House.
- Korzen, H. (1985) *Pourquoi et l'inversion finale en français: Etude sur le statut de l'adverbial de cause et l'anatomie de la construction tripartite*. Copenhagen: Munksgaard.
- Lasnik, H. and M. Saito (1984) "On the Nature of Proper Government". *Linguistic Inquiry* 15/2, 235-290.
- Le Querler, N. (1996) "La place du sujet nominal dans les subordonnées percontatives". In Fuchs C. (ed.) *La place du sujet en français contemporain*. Coll. Champs linguistiques. Paris/Gembloux: Duculot.
- Piot, M. (1988) "Coordination – subordination: une définition générale", *Langue française* 77, 5-18.
- Piot, M. (1995) "Propriétés et définition des conjonctions de subordination, de coordination et adverbies conjonctifs en français", *Leuvense Bijdragen* 84/3, 329-348.
- Rizzi, L. (1996) Residual Verb Second and the *Wh*-Criterion. In Belletti, A. and L. Rizzi (eds.) *Parameters and Functional Heads. Essays in Comparative Syntax*. Oxford: Oxford University Press, 63-90.